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Supporting Information

Three-dimensional flower-like Fe,C-doped-MoS_2/Ni_3S_2 spheres for accelerating electrocatalytic oxygen and hydrogen evolution

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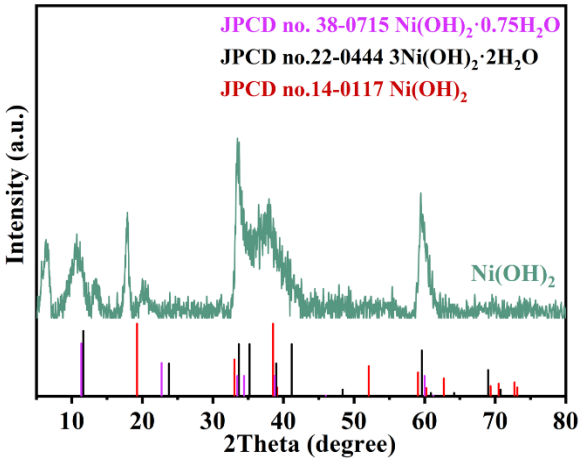

Figure S1. XRD patterns of $Ni(OH)_2$.

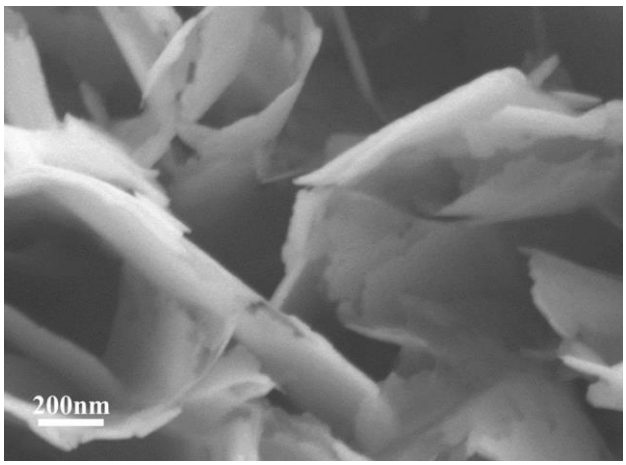

Figure S2. SEM image of $Ni(OH)_2$.

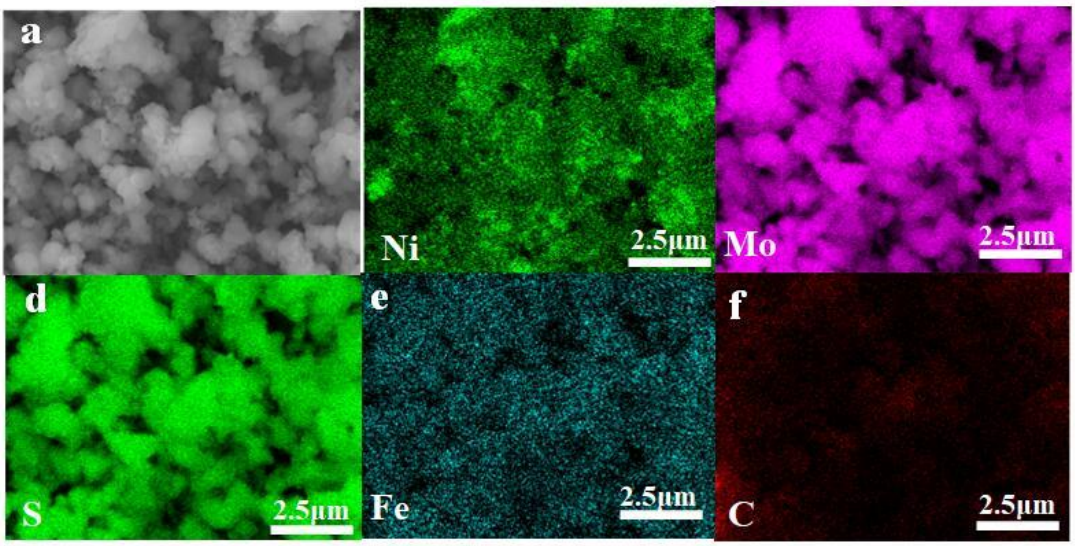

Figure S3. EDX mapping images of the Fe, C-MoS_2/Ni_3S_2-450.

Fig S3 exhibits EDX mapping images of the Fe, C-MoS_2/Ni_3S_2-450, indicating the the presence of C, S, Fe, Ni and Mo element.

Figure S4. EDX analysis images of the Fe, C-MoS_2/Ni_3S_2-450.

Energy dispersive spectroscopy was performed to analyse the composition of the Fe, C-MoS_2/Ni_3S_2-450 (Fig S4). One can see that the presence of C, S, Fe, Ni and Mo element.

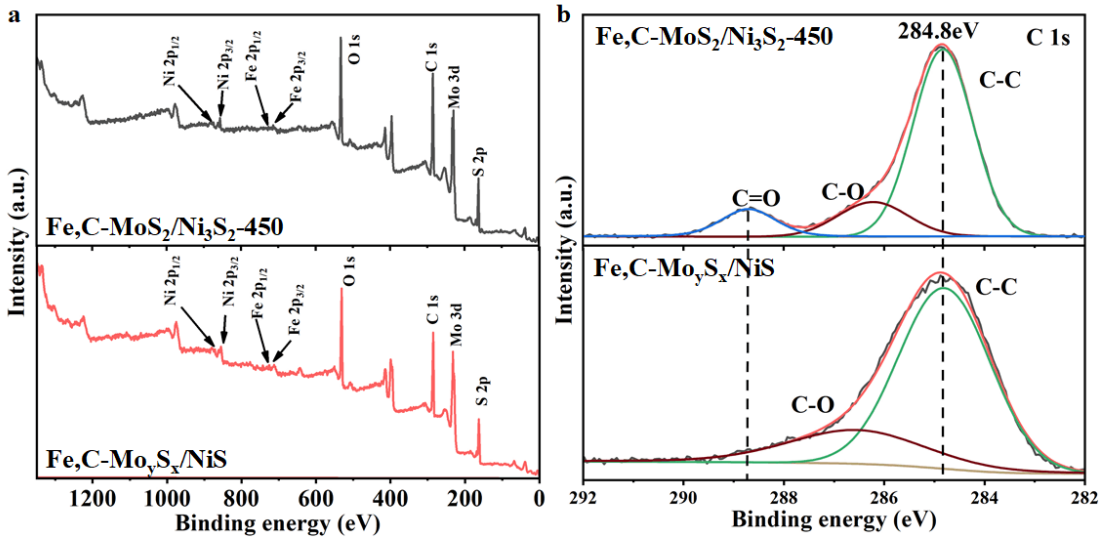

Figure S5. (**a**) XPS survey and (**b**) C 1s spectrum of the Fe, C-MoS_2/Ni_3S_2-450 and Fe, C-Mo_ySx/NiS.

As shown in Fig S5a, surfaces of samples are composed of C, S, Fe, Ni and Mo elements. The deconvoluted C 1s spectra of the Fe, C-MoS_2/Ni_3S_2-450 consisted of three peaks at 284.8, 286.4 and 288.8 eV, which corresponds to the binding energy of C-C, C-O, C=O, respectively.

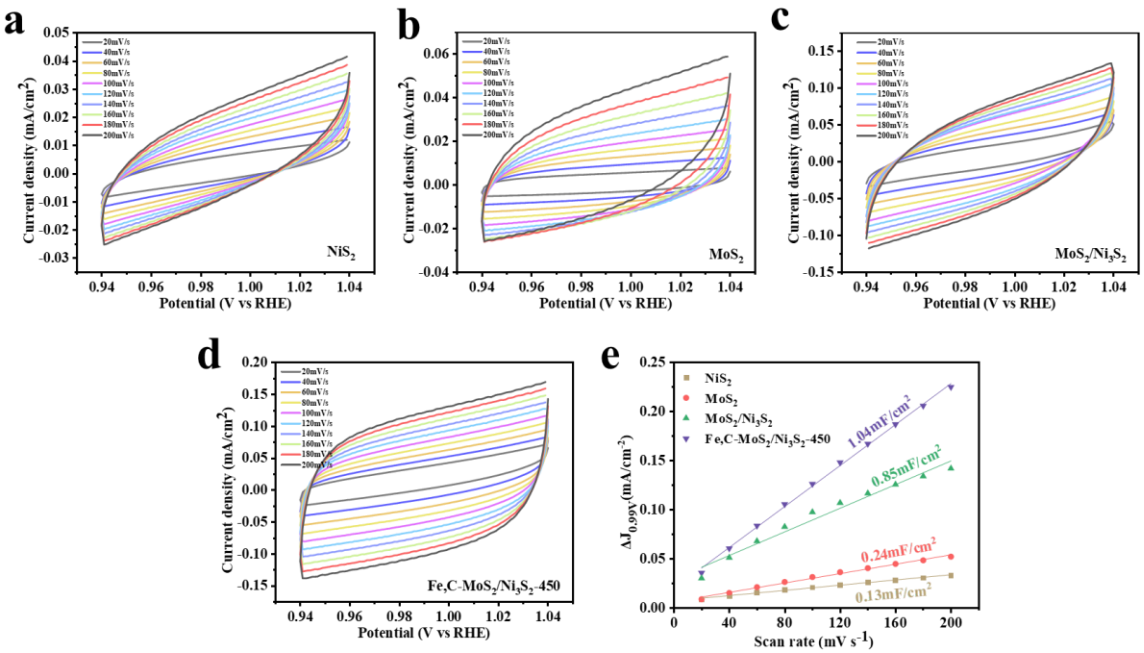

Figure S6. (a–d) CV curves of obtained samples in the window of 0.94-1.04 V vs. RHE. (**e**) estimated C_{dl} values. .